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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/020,094

Filing Date: December 13, 2001

Appellant(s): COVERSTONE, THOMAS E.

Jeffrey J. Phillips
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 18, 2007 appealing from the Office action mailed May 31, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,999,126	Ito	12-1999
5,572,221	MARLEVI et al	11-1996

(9) Grounds of Rejection

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-24, 26-37 and 39-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito (US005999126A).

Regarding claim 10, Ito discloses a system for positioning a mobile phone where a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, “wireless communication system that is used with a wireless communication device and a position location system, the wireless communication device being capable of communicating with the position location system, the wireless communication system comprising: a memory device for storing position location data for the wireless communication device; a processor for determining trends in the position location data by recalling stored information from the memory device and processing the recalled information.” Data signals may be provided from the PHS base station pertaining to traffic jam information or closed street information (see column 10, lines 40-65), which reads on the claimed, “transmitter for transmitting targeted broadcasts to the wireless communication device at least based on the determined trends.”

Regarding claim 11, Ito discloses a system for positioning a mobile phone where a current position may be estimated to some degree from a previous history (see

column 10, lines 28-39), which reads on the claimed, "wireless communication system that is used with a wireless communication device and a position location system, the wireless communication device being capable of communicating with the position location system, the wireless communication system comprising: a memory device for storing transaction data for the wireless communication device; a processor for determining trends in the transaction data by recalling stored information from the memory device and processing the recalled information." Data signals may be provided from the PHS base station pertaining to traffic jam information or closed street information (see column 10, lines 40-65), which reads on the claimed, "transmitter for transmitting targeted broadcasts to the wireless communication device at least based on the determined trends."

Regarding claim 12, Ito discloses the transmissions are received from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the targeted broadcasts are transmitted to wireless communication devices currently located in a specific area."

Regarding claim 13, Ito discloses that the position can be calculated from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the targeted broadcasts are transmitted to wireless communication devices predicted to be located in a specific area."

Regarding claim 14, Ito discloses a system for positioning a mobile phone where a current position may be estimated to some degree from a previous history (see

column 10, lines 28-39), which reads on the claimed, "wireless communication system that is used with a wireless communication device and a position location system, the wireless communication device being capable of communicating with the position location system, the wireless communication system comprising: a memory device for storing position location data for the wireless communication device; a processor for recalling stored information from the memory device and processing the recalled information." Data signals may be provided from the PHS base station pertaining to traffic jam information or closed street information (see column 10, lines 40-65), which reads on the claimed, "transmitter for transmitting targeted broadcasts to the wireless communication device at least based on the processed information."

Regarding claim 15, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, "the memory device also stored transaction data for the wireless communication device," wherein the previous history is locations determined with the system and therefore reads on transaction data.

Regarding claim 16, Ito discloses various transactions such as ordering music (see column 11, lines 44-64), which reads on the claimed, "the transaction data includes usage transactions, responses to broadcasts, requests for information, or any combination thereof."

Regarding claim 17, Ito inherently provides support for the memory device also storing preselected user information or preferences as one of ordinary skill in the art would recognize the need to store an identifier of the mobile device, which reads on the

claimed, "preselected user information," wherein the broadest reasonable interpretation in light of the specification of user information would include an identifier of the mobile device.

Regarding claim 18, Ito discloses a system for positioning a mobile phone where a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, "wireless communication system that is used with a wireless communication device and a position location system, the wireless communication device being capable of communicating with the position location system, the wireless communication system comprising: a memory device for storing position location data for the wireless communication device; a processor for recalling stored information from the memory device and processing the recalled information." Data signals may be provided from the PHS base station pertaining to traffic jam information or closed street information (see column 10, lines 40-65), which reads on the claimed, "transmitter for transmitting targeted broadcasts to the wireless communication device at least based on the current location of the wireless communication device."

Regarding claim 19, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, "the memory device also stored transaction data for the wireless communication device," wherein the previous history is locations determined with the system and therefore reads on transaction data.

Regarding claim 20, Ito discloses various transactions such as ordering music (see column 11, lines 44-64), which reads on the claimed, “the transaction data includes usage transactions, responses to broadcasts, requests for information, or any combination thereof.”

Regarding claim 21, Ito inherently provides support for the memory device also storing preselected user information or preferences as one of ordinary skill in the art would recognize the need to store an identifier of the mobile device, which reads on the claimed, “preselected user information,” wherein the broadest reasonable interpretation in light of the specification of user information would include an identifier of the mobile device.

Regarding claim 22, Ito discloses a system for positioning a mobile phone where a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, “wireless communication system comprising: a memory device capable of storing data for a plurality of wireless communication devices; a processor for recalling stored information from the memory device and processing the recalled information.” Data signals may be provided from the PHS base station pertaining to traffic jam information or closed street information (see column 10, lines 40-65), which reads on the claimed, “transmitter for transmitting a targeted broadcast to each wireless communication device in the targeted broadcast audience.”

Regarding claim 23, Ito discloses the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the targeted broadcast audience is selected from the plurality of wireless communication devices."

Regarding claim 24, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, "the stored data comprises position location data for at least one wireless communication device."

Regarding claim 26, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, "the memory device also stored transaction data for the wireless communication device," wherein the previous history is locations determined with the system and therefore reads on transaction data.

Regarding claim 27, Ito discloses various transactions such as ordering music (see column 11, lines 44-64), which reads on the claimed, "the transaction data includes usage transactions, responses to broadcasts, requests for information, or any combination thereof."

Regarding claim 28, Ito inherently provides support for the memory device also storing preselected user information or preferences as one of ordinary skill in the art would recognize the need to store an identifier of the mobile device, which reads on the claimed, "preselected user information."

Regarding claim 29, Ito discloses the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the targeted broadcast

audience is limited to wireless communication devices currently located in a specific area," wherein since the data is broadcasted, there is inherently a limited range of the broadcast.

Regarding claim 30, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the targeted broadcast audience is limited to wireless communication devices predicted to be located in a specific area."

Regarding claim 31, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the processor selects the targeted broadcast audience by determining trends in the stored data for at least one wireless communication device."

Regarding claim 32, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the processor selects the targeted broadcast audience by determining trends in the position location data for at least one wireless communication device."

Regarding claim 33, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the

processor selects the targeted broadcast audience by determining trends in the transaction data for at least one wireless communication device.”

Regarding claim 34, Ito discloses the use of broadcasting advertisements (see column 11, lines 14-24), which reads on the claimed, “the targeted broadcast comprises an advertisement.”

Regarding claim 35, Ito discloses a system for positioning a mobile phone where a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, “method for sending a targeted broadcast in a wireless communication system comprising: storing data for a plurality of wireless communication devices; processing the stored data.” Data signals may be provided from the PHS base station pertaining to traffic jam information or closed street information (see column 10, lines 40-65), which reads on the claimed, “selecting a targeted broadcast audience from the processed data, wherein the targeted broadcast audience comprises at least one wireless communication device.”

Regarding claim 36, Ito discloses the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, “the targeted broadcast audience is selected from the plurality of wireless communication devices.”

Regarding claim 37, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, “the stored data comprises position location data for at least one wireless communication device.”

Regarding claim 39, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39), which reads on the claimed, "the stored data comprises transaction data relating to at least one wireless communication device," wherein the previous history is locations determined with the system and therefore reads on transaction data.

Regarding claim 40, Ito discloses various transactions such as ordering music (see column 11, lines 44-64), which reads on the claimed, "the transaction data includes usage transactions, responses to broadcasts, requests for information, or any combination thereof."

Regarding claim 41, Ito inherently provides support for the memory device also storing preselected user information or preferences as one of ordinary skill in the art would recognize the need to store an identifier of the mobile device, which reads on the claimed, "preselected user information."

Regarding claim 42, Ito discloses the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the targeted broadcast audience is limited to wireless communication devices currently located in a specific area," wherein since the data is broadcasted, there is inherently a limited range of the broadcast.

Regarding claim 43, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, "the

targeted broadcast audience is limited to wireless communication devices predicted to be located in a specific area.”

Regarding claim 44, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, “the processor selects the targeted broadcast audience by determining trends in the stored data for at least one wireless communication device.”

Regarding claim 45, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, “the processor selects the targeted broadcast audience by determining trends in the position location data for at least one wireless communication device.”

Regarding claim 46, Ito discloses a current position may be estimated to some degree from a previous history (see column 10, lines 28-39) and the data is transmitted from a PHS base station (see column 10, lines 40-65), which reads on the claimed, “the processor selects the targeted broadcast audience by determining trends in the transaction data for at least one wireless communication device.”

Regarding claim 47, Ito discloses the use of broadcasting advertisements (see column 11, lines 14-24), which reads on the claimed, “the targeted broadcast comprises an advertisement.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 25 and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Marlevi et al (US005572221A).

Regarding claims 25 and 38, Ito fails to disclose the position location data comprises frequent routes traveled by at least one wireless communication device.

In a similar field of endeavor, Marlevi et al disclose a system that uses the regular patterns of movement that mobile phone users follow every day of the week to predict one's next location (see column 5, lines 49-67), which reads on the claimed, "frequent routes traveled by at least one wireless communication device.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Ito with Marlevi et al to include the above use of predicted

location in order to take appropriate actions before the mobile reaches a new location as suggested by Marlevi et al (see column 5, lines 57-67).

(10) Response to Argument

The Appellant argues with respect to claim 10 that Ito does not disclose a processor for determining position location trends. The Examiner respectfully disagrees. The Appellant admits Ito has the ability to estimate an automobile's current location based on a linear extrapolation of two previously known locations, and the Examiner maintains this fulfills the claimed limitations. Comparing the two previously known locations to estimate a third is a position location trend. One of ordinary skill in the art would recognize a processor would be required to do this comparison, fulfilling the claimed limitation.

The Appellant argues with respect to claim 10 that Ito does not disclose a transmitter for transmitting targeted broadcasts based on position location trends. The Examiner respectfully disagrees. Ito discloses a PHS base station providing traffic information, such as traffic jam information, closed street information, construction information, or the like (see column 10, lines 40-65). The Examiner maintains this reads on the broadest reasonable interpretation in light of the specification of the claimed, "transmitter for transmitting targeted broadcasts based on position location trends." The traffic information is targeted as it is relevant only to people near the location. The cells in a PHS system are often narrow and positioned, for example, at intervals of 10 meters (see column 4, lines 27-37). Therefore, the information provided that is relevant only to the particular location, such as traffic information, fulfills the claimed limitation of

“targeted.” The intent of the information to be location specific is seen even more clearly in a later examples of information on events at stores, and so on near the current position (see column 11, lines 14-23) and routing information (see column 11, lines 24-38). One of ordinary skill in the art would recognize the location specific nature of the information broadcasted from a PHS base station fulfills the claimed limitation of “targeted broadcast.”

The Appellant argues with respect to claim 11 that Ito does not disclose a processor for determining transaction trends. The Examiner respectfully disagrees. The Appellant admits Ito has the ability to estimate an automobile’s current location based on a linear extrapolation of two previously known locations, and the Examiner maintains this fulfills the claimed limitations. Comparing the two previously known locations to estimate a third is a position location trend. The past locations are known from communication between the mobile station and the system, e.g. base station ID codes (see column 10, lines 28-39), fulfilling the limitation of a transaction. One of ordinary skill in the art would recognize a processor would be required to do this comparison, fulfilling the claimed limitation. The Appellant points to the specification for defining transaction trends, however the Examiner would like to point out that while a limitation is read in light of the specification, limitations from the specification may not be read into the claims. The Examiner has not found an explicit definition of the term “transaction trend” in the specification and has therefore given the term the broadest reasonable interpretation in light of the specification. One of ordinary skill in the art

would not conclude the term “transaction trend” would be limited to the examples given by the Appellant.

The Appellant argues with respect to claim 11 that Ito does not disclose a transmitter for transmitting targeted broadcasts based on transaction trends. The Examiner respectfully disagrees. As discussed above, Ito discloses a PHS base station providing traffic information, such as traffic jam information, closed street information, construction information, or the like (see column 10, lines 40-65). The Examiner maintains this reads on the broadest reasonable interpretation in light of the specification of the claimed, “transmitter for transmitting targeted broadcasts based on transaction trends.” The traffic information is targeted as it is relevant only to people near the location. The cells in a PHS system are often narrow and positioned, for example, at intervals of 10 meters (see column 4, lines 27-37). Therefore, the information provided that is relevant only to the particular location, such as traffic information, fulfills the claimed limitation of “targeted.” The intent of the information to be location specific is seen even more clearly in a later examples of information on events at stores, and so on near the current position (see column 11, lines 14-23) and routing information (see column 11, lines 24-38). One of ordinary skill in the art would recognize the location specific nature of the information broadcasted from a PHS base station fulfills the claimed limitation of “targeted broadcast.”

The Appellant argues with respect to claim 14 that Ito does not disclose a transmitter for transmitting targeted broadcasts based on position location data. The Examiner respectfully disagrees. As discussed above, Ito discloses a PHS base station

providing traffic information, such as traffic jam information, closed street information, construction information, or the like (see column 10, lines 40-65). The Examiner maintains this reads on the broadest reasonable interpretation in light of the specification of the claimed, "transmitter for transmitting targeted broadcasts based on processed position location data." The traffic information is targeted as it is relevant only to people near the location. The cells in a PHS system are often narrow and positioned, for example, at intervals of 10 meters (see column 4, lines 27-37). Therefore, the information provided that is relevant only to the particular location, such as traffic information, fulfills the claimed limitation of "targeted." The intent of the information to be location specific is seen even more clearly in a later examples of information on events at stores, and so on near the current position (see column 11, lines 14-23) and routing information (see column 11, lines 24-38). One of ordinary skill in the art would recognize the location specific nature of the information broadcasted from a PHS base station fulfills the claimed limitation of "targeted broadcast."

The Appellant argues with respect to claim 18 that Ito does not disclose a transmitter for transmitting targeted broadcasts based on the current location of the wireless device. The Examiner respectfully disagrees. As discussed above, Ito discloses a PHS base station providing traffic information, such as traffic jam information, closed street information, construction information, or the like (see column 10, lines 40-65). The Examiner maintains this reads on the broadest reasonable interpretation in light of the specification of the claimed, "transmitter for transmitting targeted broadcasts based on the current location of the wireless device." The traffic

information is targeted as it is relevant only to people near the location. The cells in a PHS system are often narrow and positioned, for example, at intervals of 10 meters (see column 4, lines 27-37). Therefore, the information provided that is relevant only to the particular location, such as traffic information, fulfills the claimed limitation of "targeted." The intent of the information to be location specific is seen even more clearly in a later examples of information on events at stores, and so on near the current position (see column 11, lines 14-23) and routing information (see column 11, lines 24-38). One of ordinary skill in the art would recognize the location specific nature of the information broadcasted from a PHS base station fulfills the claimed limitation of "targeted broadcast."

The Appellant argues with respect to claims 22 and 35 that Ito does not disclose a processor for selecting a target broadcast audience or a transmitter for transmitting a targeted broadcast. The Examiner respectfully disagrees. As discussed above, Ito discloses a PHS base station providing traffic information, such as traffic jam information, closed street information, construction information, or the like (see column 10, lines 40-65). Further, later examples of information on events at stores, and so on near the current position (see column 11, lines 14-23) and routing information (see column 11, lines 24-38) show the location specific nature of the broadcast information. As the information provided is location specific, it fulfills the limitation of "transmitter for transmitting a targeted broadcast." One of ordinary skill in the art would recognize the information broadcast is selected for a specific audience, fulfilling the limitation of "a processor for selecting a target broadcast audience."

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Bryan Fox 

Conferees:

Charles Appiah


CHARLES N. APPIAH
SUPERVISORY PATENT EXAMINER

William Trost


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600